## Release notes for ENDF/B Development n-052\_Te\_124 evaluation



April 26, 2017

- checkr Warnings:
  - 1. A previous error halted parsing of the current section MAT=5237, MF=1, MT=451 (1): Parsing stopped

ERROR(S) FOUND IN MAT=5237, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER 267 TO 323

- checkr Errors:
  - 1. A variable is outside the allowed ENDF range MAT=5237, MF=1, MT=451 (0): Variable range

ERROR(S) FOUND IN MAT=5237, MF= 1, MT=451
MOD = 1 OUT OF RANGE 0 - 0 RECORD NUMBER 267

2. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=2, MT=151 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY RECORD NUMBER 325

3. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=1 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY RECORD NUMBER 575

4. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=2 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY RECORD NUMBER 602

5. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=4 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY RECORD NUMBER 629

6. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=16 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY RECORD NUMBER 646

7. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 17 SECTION 3/ 17 NOT IN DIRECTORY

RECORD NUMBER 656

8. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 22 SECTION 3/ 22 NOT IN DIRECTORY

RECORD NUMBER 662

9. Missing a section in directory so your directory is messed up. This error will break everything else MAT = 5237, MF = 3, MT = 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 28 SECTION 3/ 28 NOT IN DIRECTORY

RECORD NUMBER 677

10. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 51 SECTION 3/51 NOT IN DIRECTORY

RECORD NUMBER 688

11. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 52 SECTION 3/52 NOT IN DIRECTORY

RECORD NUMBER 705

12. Missing a section in directory so your directory is messed up. This error will break everything else MAT = 5237, MF = 3, MT = 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 53

SECTION 3/53 NOT IN DIRECTORY

RECORD NUMBER

720

13. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 54 SECTION 3/54 NOT IN DIRECTORY

RECORD NUMBER 735

14. Missing a section in directory so your directory is messed up. This error will break everything else MAT = 5237, MF = 3, MT = 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 55 SECTION 3/55 NOT IN DIRECTORY

RECORD NUMBER 749

15. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 56 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 56 SECTION 3/ 56 NOT IN DIRECTORY

RECORD NUMBER 763

16. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 57 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 57 SECTION 3/ 57 NOT IN DIRECTORY

RECORD NUMBER 776

17. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 58 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 58 SECTION 3/ 58 NOT IN DIRECTORY

RECORD NUMBER 789

18. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 59 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 59 SECTION 3/ 59 NOT IN DIRECTORY

RECORD NUMBER 801

19. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 60 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 60 SECTION 3/ 60 NOT IN DIRECTORY

RECORD NUMBER 813

20. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=61 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 61

SECTION 3/ 61 NOT IN DIRECTORY

RECORD NUMBER 825

21. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 62 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 62 SECTION 3/ 62 NOT IN DIRECTORY

RECORD NUMBER 836

22. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=63 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 63 SECTION 3/ 63 NOT IN DIRECTORY

RECORD NUMBER 847

23. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=64 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 64 SECTION 3/ 64 NOT IN DIRECTORY

RECORD NUMBER 857

24. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 65 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 65 SECTION 3/ 65 NOT IN DIRECTORY

RECORD NUMBER 867

25. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT= 91 SECTION 3/ 91 NOT IN DIRECTORY

RECORD NUMBER 877

26. Missing a section in directory so your directory is messed up. This error will break ev-

erything else MAT=5237, MF=3, MT=102 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT=102 SECTION 3/102 NOT IN DIRECTORY

RECORD NUMBER 886

27. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 103 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT=103 SECTION 3/103 NOT IN DIRECTORY

RECORD NUMBER 909

28. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=104 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT=104

SECTION 3/104 NOT IN DIRECTORY

RECORD NUMBER 923

29. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 3, MT = 105 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT=105 SECTION 3/105 NOT IN DIRECTORY

RECORD NUMBER 935

30. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=3, MT=107 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 3, MT=107 SECTION 3/107 NOT IN DIRECTORY

RECORD NUMBER 945

31. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=2 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 2 SECTION 4/ 2 NOT IN DIRECTORY

RECORD NUMBER 962

32. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 4, MT = 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 16 SECTION 4/ 16 NOT IN DIRECTORY

RECORD NUMBER 1152

33. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 17 SECTION 4/ 17 NOT IN DIRECTORY

RECORD NUMBER 1163

34. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 22 SECTION 4/ 22 NOT IN DIRECTORY

RECORD NUMBER 1174

35. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 28 SECTION 4/ 28 NOT IN DIRECTORY

RECORD NUMBER 1185

36. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=51 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 51 SECTION 4/ 51 NOT IN DIRECTORY

RECORD NUMBER 1196

37. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=52 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 52 SECTION 4/ 52 NOT IN DIRECTORY

RECORD NUMBER 1226

38. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=53 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 53 SECTION 4/ 53 NOT IN DIRECTORY

RECORD NUMBER 1252

39. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=54 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 54 SECTION 4/ 54 NOT IN DIRECTORY

RECORD NUMBER 1278

40. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 4, MT = 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 55 SECTION 4/ 55 NOT IN DIRECTORY

RECORD NUMBER 1304

41. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 4, MT = 56 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 56 SECTION 4/ 56 NOT IN DIRECTORY

RECORD NUMBER 1330

42. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 4, MT = 57 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 57 SECTION 4/ 57 NOT IN DIRECTORY

RECORD NUMBER 1356

43. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=58 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 58 SECTION 4/ 58 NOT IN DIRECTORY

RECORD NUMBER 1382

44. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=59 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 59 SECTION 4/ 59 NOT IN DIRECTORY

RECORD NUMBER 1408

45. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=60 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 60 SECTION 4/ 60 NOT IN DIRECTORY

RECORD NUMBER 1434

46. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=61 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 61 SECTION 4/ 61 NOT IN DIRECTORY

RECORD NUMBER 1460

47. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=4, MT=62 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 62 SECTION 4/ 62 NOT IN DIRECTORY

RECORD NUMBER 1486

48. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 4, MT = 63 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 63 SECTION 4/63 NOT IN DIRECTORY

RECORD NUMBER 1512

49. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 4, MT = 64 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 64 SECTION 4/64 NOT IN DIRECTORY

RECORD NUMBER 1538

50. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 4, MT = 65 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 65 SECTION 4/65 NOT IN DIRECTORY

RECORD NUMBER 1564

51. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 4, MT = 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 4, MT= 91 SECTION 4/ 91 NOT IN DIRECTORY

RECORD NUMBER 1589

52. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 5, MT = 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 5, MT= 16 SECTION 5/ 16 NOT IN DIRECTORY

RECORD NUMBER 1617

53. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 5, MT = 17 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 5, MT= 17 SECTION 5/ 17 NOT IN DIRECTORY

RECORD NUMBER 1675

54. Missing a section in directory so your directory is messed up. This error will break everything else MAT = 5237, MF = 5, MT = 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 5, MT= 22

SECTION 5/ 22 NOT IN DIRECTORY

RECORD NUMBER 1700

55. Missing a section in directory so your directory is messed up. This error will break everything else

MAT = 5237, MF = 5, MT = 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 5, MT= 28 SECTION 5/ 28 NOT IN DIRECTORY

RECORD NUMBER 1890

56. Missing a section in directory so your directory is messed up. This error will break everything else MAT=5237, MF=5, MT=91 (0): Directory (b)

ERROR(S) FOUND IN MAT=5237, MF= 5, MT= 91 SECTION 5/ 91 NOT IN DIRECTORY

RECORD NUMBER 1994

- groupie Errors:
  - 1. Very small elastic cross section found 0: Small elastic

- fudge-4.0 Warnings:
  - 1. Missing a channel with a particular angular momenta combination resonances / resolved / MultiLevel\_BreitWigner (Error # 0): missingResonanceChannel

WARNING: Missing a channel with angular momenta combination L=0, J=1.5 and S=1.5 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=0.5 and S=1.5 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=1.5 and S=1.5 for "capture" WARNING: Missing a channel with angular momenta combination L=1, J=2.5 and S=1.5 for "capture"

2. Cross section does not match sum of linked reaction cross sections crossSectionSum label 0: total (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.47%

3. Cross section does not match sum of linked reaction cross sections  $crossSectionSum\ label\ 1:\ (z,n)\ (Error\ \#\ 0):\ CS\ Sum.$ 

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.14%

- fudge-4.0 Errors:
  - 1. Calculated and tabulated Q values disagree. reaction label 17: n[multiplicity:'2'] + Te123 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8891446.159942627 eV vs -9428890. eV!

2. Calculated and tabulated Q values disagree.

reaction label 18: n[multiplicity:'3'] + Te122 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -15820629.86207581 eV vs -1.63665e7 eV!

3. Calculated and tabulated Q values disagree. reaction label 19: n + H1 + Sb123 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8056880.896377563 eV vs -8594430. eV!

4. Calculated and tabulated Q values disagree. reaction label 20:  $Te125 + gamma \ (Error \# 0)$ : Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 7101495.742645264 eV vs 6571430. eV!

5. Calculated and tabulated Q values disagree. reaction label 21: n + He4 + Sn120 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -1311865.509094238 eV vs -1.8384e6 eV!

6. Calculated and tabulated Q values disagree. reaction label 22: H1 + Sb124-s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -1589384.766693115 eV vs -2122430. eV!

7. Calculated and tabulated Q values disagree. reaction label 23: H2 + Sb123-s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -5832314.795440674 eV vs -6284310. eV!

8. Calculated and tabulated Q values disagree. reaction label 24:  $H3 + Sb122\_s$  (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -8540336.422805786 eV vs -9069460. eV!

9. Calculated and tabulated Q values disagree. reaction label 25: He4 + Sn121-s (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 4858455.143295288 eV vs 4.3377e6 eV!

## • njoy2012 Warnings:

1. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

groupr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 16 only mf4/mf5 provided

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

group-...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 17 only mf4/mf5 provided

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

groupr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

- ---message from conver---cannot do complete particle production for mt= 22 only mf4/mf5 provided
- 4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

  groupr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)
  - ---message from conver---cannot do complete particle production for mt= 28 only mf4/mf5 provided
- 5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!

  groupr...compute self-shielded group-averaged cross-sections (4): GROUPR/conver (0)

---message from conver---cannot do complete particle production for mt= 91 only mf4/mf5 provided